

C-A Unreviewed Safety Issue (USI) Form

Title of USI: Change to RHIC Tunnel Exhaust Fan Logic From Fire Alarm

Description of USI (use attachments if necessary): The RHIC Tunnel fans are part of the PASS and they are currently programmed to start upon activation of a fire alarm at all times. This action purges the Tunnel of smoke to protect personnel who may be present at the time of the fire. It is proposed to change the Tunnel fan start logic as follows:

1. Inhibit automatic Tunnel fan start on fire alarm when the RHIC Tunnel is in the "access prohibited" mode. There are no people present in the Tunnel in this PASS mode. Thus, there are no Life Safety Code issues and no adverse health and safety effects caused by this change. See attached e-mail from J. Levesque, BNL Fire Protection Engineer (forwarded by A. Etkin, dated 7/31/00).
2. The Tunnel fans will still be able to be manually operated at the tunnel entrances.

The reason for this change is to prevent potential programmatic impacts caused by the introduction of humid air into the Tunnel. This change has no effect on the fan logic in the RHIC experimental areas. The experimental area fans already do not start on fire alarms.

Title and Date of Relevant SAD: RHIC SAD (12/30/99)

Committee Chair or ESHQ Division Head must initial all items. Leave no blanks:

ITEM	APPLIES	DOES NOT APPLY
Decision to not revise the current SAD and/or ASE at this time: The hazard associated with the proposed work or event is covered within an existing SAD and/or ASE. SAD Title and Date: <u>RHIC SAD (12/30/99)</u> This Form and attachments, if necessary, shall be used to document the USI until the next revision of the appropriate SAD.	<i>Beu</i>	
Decision to submit a revised SAD and/or ASE to the BNL ESH Committee: The hazard associated with the proposed work is not appropriately included in an SAD.		<i>Beu</i>

Ray Karol

Signature of C-A Committee Chair or C-A ESHQ Division Head

8/9/00

Date

Edward T. Leonard

Signature of C-A Associate Chair for ESHQ

8-29-00

Date

USI

Lessard, Edward T

From: Asher Etkin [etkin@bnl.gov]
Sent: Monday, July 31, 2000 9:54 AM
To: Edward Lessard; Raymond Karol
Subject: [Fwd: Automatic Smoke Removal disabled when RHIC tunnel unoccupied]

FYI

"Levesque, Joseph W" wrote:

> This is to inform you of a change in the RHIC Emergency Fan system
> (smoke and cryo removal).
>
> RHIC tunnel fans were programmed to automatically purge the tunnel when
> there was a fire alarm. Due to the high humidity conditions and the
> condensation on the cool metal equipment, the fans have been
> reprogrammed so they will NOT automatically go on with a fire alarm WHEN
> THE TUNNEL IS NOT OCCUPIED.
>
> The automatic activation of the fans was a requirement of the Life
> Safety Code. PASS (the RHIC control system for entrance into the
> tunnels) ensures that the access to the tunnel is controlled. PASS
> knows when the tunnel is unoccupied. When the tunnel is placed into the
> beam ready state, the automatic activation of the fans will be disabled
> (no people present).
>
> The Tunnel Fans can still be turned on by the manual activation station
> at the tunnel entrances.
>
> (Note to project staff: This modification should be documented in the
> SAR fire protection section)
>
> Joe Levesque
> Fire Protection
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